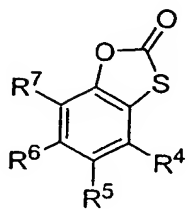
What is claimed is:

1. A compound represented by Formula I



I

or pharmaceutically acceptable salts thereof wherein:

R^4, R^5, R^6, and R^7 are independently selected from the group consisting of:

H, halogen, cyano, azide, formyl, substituted and unsubstituted C(1-8) alkyl, C(1-8) fluoroalkyl, substituted and unsubstituted aralkyl, substituted and unsubstituted aryl, substituted and unsubstituted heteroaryl, substituted and unsubstituted biphenyl,

XR^8, wherein X is S or O, and R^8 is selected from the group consisting of H, substituted and unsubstituted C(1-8) alkyl, C(1-8) fluoroalkyl, substituted and unsubstituted acyl, substituted and unsubstituted arylcarbonyl, substituted and unsubstituted heteroarylcarbonyl, substituted and unsubstituted alkylaminocarbonyl, substituted and unsubstituted arylaminocarbonyl, substituted and unsubstituted heteroarylaminocarbonyl, substituted and unsubstituted aralkyl substituted and unsubstituted aryl, substituted and unsubstituted heteroaryl, substituted and unsubstituted alkylsulfonyl, substituted and unsubstituted arylsulfonyl, substituted and unsubstituted heteroarylsulfonyl, and

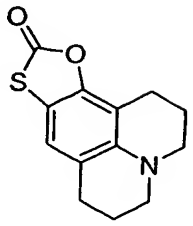
NR^9R^{10}, wherein R^9 and R^{10} are independently selected from the group consisting of H, substituted and unsubstituted C(1-8) alkyl, C(1-8) fluoroalkyl,substituted and unsubstituted acyl, substituted and unsubstituted arylcarbonyl, substituted and unsubstituted heteroarylcarbonyl, substituted and unsubstituted alkylaminocarbonyl, substituted and unsubstituted arylaminocarbonyl, substituted and unsubstituted heteroarylaminocarbonyl, substituted and unsubstituted aralkyl substituted and unsubstituted aryl, substituted and unsubstituted heteroaryl, substituted and unsubstituted alkylsulfonyl, substituted and unsubstituted arylsulfonyl, substituted and unsubstituted

heteroarylsulfonyl, or wherein R^9 and R^{10} are combined to form a heteroalkyl, substituted heteroalkyl, heteroaryl, and substituted heteroaryl ring system; and wherein

R^4 and R^5 may be combined to form a cycloalkyl, substituted cycloalkyl, heterocycloalkyl, substituted heterocycloalkyl, aryl, substituted aryl, heteroaryl, or substituted heteroaryl ring system; and

R^6 and R^7 may be combined to form a cycloalkyl, substituted cycloalkyl, heterocycloalkyl, substituted heterocycloalkyl, aryl, substituted aryl, heteroaryl, or substituted heteroaryl ring system,

with the proviso that the following compounds are excluded: 5-(N-cyclohexylcarbamoyloxy)-7-methylbenzo[1,3]oxathiol-2-one (31), 5-(3-chlorobenzothiophen-2-ylcarbonyloxy)-7-phenylbenzo[1,3]oxathiol-2-one (33), 6-(4-nitrophenylcarbonyloxy)-7-phenylbenzo[1,3]oxathiol-2-one (34), 5-hydroxy-7-(4-fluorophenyl)benzo[1,3]oxathiol-2-one (35), 5-hydroxy-7-(2-chlorophenyl)benzo[1,3]oxathiol-2-one (36), 5-hydroxy-7-(3-chlorophenyl)benzo[1,3]oxathiol-2-one (37), 5-(2-chlorophenylcarbonyloxy)-7-(3-chlorophenyl)benzo[1,3]oxathiol-2-one (38), 5-hydroxy-7-(4-chlorophenyl)benzo[1,3]oxathiol-2-one (39), 5-(2-chlorophenylcarbonyloxy)-7-(4-chlorophenyl)benzo[1,3]oxathiol-2-one (40), 5-hydroxy-7-(2,4-dichlorophenyl)benzo[1,3]oxathiol-2-one (41), 5-hydroxy-7-(2,5-dichlorophenyl)benzo[1,3]oxathiol-2-one (42), 5-hydroxy-7-(3,4-dichlorophenyl)benzo[1,3]oxathiol-2-one (43), 5-hydroxy-7-(4-bromophenyl)benzo[1,3]oxathiol-2-one (44), 5-hydroxy-7-(3-methylphenyl)benzo[1,3]oxathiol-2-one (46), 5-hydroxy-7-(4-methylphenyl)benzo[1,3]oxathiol-2-one (47), 5-(2-chlorophenylcarbonyloxy)-7-(3-methylphenyl)benzo[1,3]oxathiol-2-one (48), 5-hydroxy-7-(2-trifluoromethylphenyl)benzo[1,3]oxathiol-2-one (51), 5-hydroxy-7-(4-methoxyphenyl)benzo[1,3]oxathiol-2-one (53), 7-ethylamino-5-methylbenzo[1,3]oxathiol-2-one (56),



(57) , 5-hydroxy-7-((2-naphthy)sulfanyl)benzo[1,3]oxathiol-2-one (23), 5-(N-Butylcarbamoyloxy)-7-((2-naphthyl)sulfanyl)benzo[1,3]oxathiol-2-one (25), and 4-hydroxy-3-((2-naphthyl)sulfanyl)naphtha[2,1-d]1,3-oxathiol-2-one (60).

2. The compound according to claim 1, wherein R^7 is selected from the group consisting of substituted or unsubstituted arylthio, substituted or unsubstituted heteroarylthio, and R^5 is selected from the group consisting of hydroxyl, substituted alkylcarbonyloxy or substituted alkylaminocarbonyloxy moiety containing an amino, mono- or disubstituted amino, pyridyl, piperidinyl, piperazinyl, morpholino, thiomorpholino, or pyrrolidinyl moiety, substituted or unsubstituted prolinyloxy, substituted or unsubstituted heteroarylcarbonyloxy, substituted or unsubstituted heteroarylaminocarbonyloxy.

3. The compound according to claim 1, wherein R^7 is substituted or unsubstituted haloaryl, and R^5 is selected from the group consisting of hydroxyl, substituted alkylcarbonyloxy or substituted alkylaminocarbonyloxy moiety containing an amino, mono- or disubstituted amino, pyridyl, piperidinyl, piperazinyl, morpholino, thiomorpholino, or pyrrolidinyl moiety, substituted or unsubstituted prolinyloxy, substituted or unsubstituted heteroarylcarbonyloxy, substituted or unsubstituted heteroarylaminocarbonyloxy.

4. The compound according to claim 1, wherein R^5 is a substituted alkylcarbonyloxy or substituted alkylaminocarbonyloxy moiety containing an amino, mono- or disubstituted amino, pyridyl, or piperidinyl, piperazinyl, morpholino, or pyrrolidinyl moiety, substituted or unsubstituted heteroarylcarbonyloxy, substituted or unsubstituted heteroarylaminocarbonyloxy, substituted or unsubstituted prolinyloxy, and R^7 is a substituted or non-substituted biphenyl moiety.

5. The compound according to any one of claims 1 to 4, wherein R^4 and R^6 are hydrodgen.

6. The compound according to claim 1, wherein the compound is 5-(N-(4-methoxyphenyl)carbamoyloxy)-7-((2-naphthyl)sulfanyl)benzo[1,3]oxathiol-2-one (26).

7. The compound according to claim 1, wherein the compound is 5-hydroxy-7-(3-iodophenyl)benzo[1,3]oxathiol-2-one (45).

8. The compound according to claim 1, wherein the compound is 5-hydroxy-6-(2,6-dimethylphenyl)benzo[1,3]oxathiol-2-one (50).

9. The compound according to claim 1, wherein the compound is 5-hydroxy-7-((2-trifluoromethylphenyl)sulfanyl)benzo[1,3]oxathiol-2-one (18).

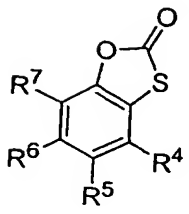
10. The compound according to claim 1, wherein the compound is 5-hydroxy-7-((N-methyltetrazol-2-yl)sulfanyl)benzo[1,3]oxathiol-2-one (19).

11. The compound according to claim 1, wherein the compound is 5-hydroxy-7-biphenylbenzo[1,3]oxathiol-2-one (54).

12. The compound according to claim 1, wherein the compound is 5-(3-pyridylcarbonyloxy)-7-biphenylbenzo[1,3]oxathiol-2-one (55).

13. The compound according to claim 1, wherein the compound is 5-(N,N, dimethylaminomethylcarbonyloxy)-7-biphenylbenzo[1,3]oxathiol-2-one (61).

14. A pharmaceutical composition for the prevention of neuronal cell loss or for the treatment of nerve cell or axonal degradation, comprising a compound represented by Formula I



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or pharmaceutically acceptable salts thereof,

together with a suitable pharmaceutically acceptable diluent or carrier,

wherein:

R^4, R^5, R^6, and R^7 are independently selected from the group consisting of:

H, halogen, cyano, azide, formyl, substituted and unsubstituted C(1-8) alkyl, C(1-8) fluoroalkyl, substituted and unsubstituted aralkyl, substituted and unsubstituted aryl,, substituted and unsubstituted heteroaryl, substituted and unsubstituted biphenyl,

XR^8, wherein X is S or O, and R^8 is selected from the group consisting of H, substituted and unsubstituted C(1-8) alkyl, C(1-8) fluoroalkyl,substituted and unsubstituted acyl, substituted and unsubstituted arylcarbonyl, substituted and unsubstituted heteroarylcarbonyl, substituted and unsubstituted alkylaminocarbonyl, substituted and unsubstituted arylaminocarbonyl, substituted and unsubstituted heteroarylaminocarbonyl, substituted and unsubstituted aralkyl substituted and unsubstituted aryl, substituted and unsubstituted heteroaryl, substituted and unsubstituted alkylsulfonyl, substituted and unsubstituted arylsulfonyl, substituted and unsubstituted heteroarylsulfonyl and

NR^9R^{10}, wherein R^9 and R^{10} are independently selected from the group consisting of H, substituted and unsubstituted C(1-8) alkyl, C(1-8) fluoroalkyl,substituted and unsubstituted acyl, substituted and unsubstituted arylcarbonyl, substituted and unsubstituted heteroarylcarbonyl, substituted and unsubstituted alkylaminocarbonyl, substituted and unsubstituted arylaminocarbonyl, substituted and unsubstituted heteroarylaminocarbonyl, substituted and unsubstituted aralkyl substituted and unsubstituted aryl, substituted and unsubstituted heteroaryl, substituted and unsubstituted alkylsulfonyl, substituted and unsubstituted arylsulfonyl, substituted and unsubstituted heteroarylsulfonyl, or wherein R^9 and R^{10} are combined to form a heteroalkyl,

substituted heteroalkyl, heteroaryl, and substituted heteroaryl ring system; and wherein

R^4 and R^5 may be combined to form a cycloalkyl, substituted cycloalkyl, heterocycloalkyl, substituted heterocycloalkyl, aryl, substituted aryl, heteroaryl, or substituted heteroaryl ring system; and

R^6 and R^7 may be combined to form a cycloalkyl, substituted cycloalkyl, heterocycloalkyl, substituted heterocycloalkyl, aryl, substituted aryl, heteroaryl, or substituted heteroaryl ring system.

15. A pharmaceutical composition for the prevention of neuronal cell loss or for the treatment of nerve cell or axonal degradation, comprising the compound of any one of claims 1 to 14, together with a suitable pharmaceutically acceptable diluent or carrier.

16. The composition of claim 14 or 15, for the prevention or treatment of a neurodegenerative disease of the central and/or peripheral nervous systems.

17. The composition of claim 14 or 15, for the treatment of degenerative diseases of the eye.

18. The composition of claim 14 or 15, for the induction of axonal growth.

19. The composition of claim 14 or 15, for altering signal transduction.

20. A use of the composition of claim 14 or 15, for the prevention of neuronal cell loss or for the treatment of nerve cell or axonal degradation.

21. A use of the composition of claim 14 or 15, for the manufacture of a medicament for the prevention of neuronal cell loss or for the treatment of nerve cell or axonal degradation.

22. A method for the prevention of neuronal cell loss or for the treatment of nerve cell or axonal degradation, comprising administering to a patient an effective amount of the composition of claim 14 or 15.

23. The method of claim 22, for the prevention or treatment of a neurodegenerative disease of the central and/or peripheral nervous systems.

24. The method of claim 22, for the treatment of degenerative diseases of the eye.

25. The method of claim 22, for the induction of axonal growth.

26. The method of claim 22, for altering signal transduction.

27. A commercial package containing the composition of claim 14 or 15 , together with instruction for its use for the prevention of neuronal cell loss or for the treatment of nerve cell or axonal degradation.